WHAT IS CLAIMED IS:

1. An aircraft pneumatic cabin pressure control system adapted to prevent the difference between cabin pressure and atmospheric pressure from exceeding a threshold value wherein the threshold value varies in relation to aircraft altitude.

2. The system of claim 1 wherein the threshold value alternates between at least two values where it is a first value while the aircraft is below a certain altitude and a second value while the aircraft is above that altitude.

3. The system of claim 2 wherein the threshold value alternates between exactly two pre-determined values.

4. The system of claim 1 comprising at least one outflow valve adapted to prevent the difference between cabin pressure and atmospheric pressure from exceeding a threshold value wherein the control system is adapted to override the outflow valve at predetermined altitudes.

5. The system of claim 4 wherein overriding the outflow valve at predetermined altitudes comprises isolating a pressure input port of the outflow valve from changes in atmospheric pressure.

6. The system of claim 5 wherein the outflow valve input port is isolated whenever the aircraft exceeds a pre-determined altitude.

7. The system of claim 6 wherein isolating the outflow valve input port comprises an aneroid switch closing a solenoid valve.

8. The system of claim 7 wherein the aneroid switch closes the solenoid valve if the aircraft exceeds a pre-determined altitude.

9. The system of claim 7 wherein the control system comprises a safety valve in addition to at least one outflow valve, wherein both the outflow valve and safety valve are adapted to prevent the difference between cabin pressure and atmospheric pressure from exceeding a threshold value and the threshold value for the outflow valve differs from that for the safety valve.

10. The system of claim 9 wherein the threshold value for the outflow valve is set lower than the threshold value of the safety valve.

11. The system of claim 10 further comprising a secondary differential controller that causes the outflow valve to open if the difference between cabin pressure and atmospheric pressure exceeds the threshold value of the secondary differential controller, and to do so even if the outflow valve input port has been isolated by the solenoid valve.

12. The system of claim 11 wherein the threshold value for the outflow valve is between 4.8 and 5.0 psi, and the threshold value of both the safety valve and secondary differential controller is between 5.4 and 5.6 psi.

13. The system of claim 12 wherein the threshold value of the outflow valve is 4.94 psi and the threshold value of the safety valve is 5.5 psi, and the aneroid switch closes the solenoid valve if the aircraft exceeds an altitude of 26,000 feet.

14. An aircraft pneumatic cabin pressure control, system comprising:

an outflow valve having a true static atmosphere input port;

a solenoid valve coupled to the input port;

and an aneroid switch electrically coupled to the solenoid valve such that when a certain altitude is reached and/or exceeded, the aneroid switch causes the solenoid valve to close so as to isolate the input port from pressure changes that occur while the solenoid valve is closed.

15. The system of claim 14 wherein the system comprises a secondary differential controller that causes the outflow valve to open if the difference between cabin pressure and atmospheric pressure exceeds the threshold value of the secondary differential controller, and to do so even if the outflow valve input port has been isolated by the solenoid valve.

16. A method for controlling the cabin pressure of an aircraft using a pneumatic cabin pressure control system that includes an outflow valve comprising at least two pressure input ports, the method comprising coupling an isolation valve to an input port of the outflow control valve and utilizing the interrupt valve to isolate the outflow valve input port to which the isolation valve is coupled from pressure changes.

17. The method of claim 16 further comprising causing the interrupt valve to isolate the outflow valve input port whenever the aircraft exceeds a pre-determined altitude.

18. The method of claim 17 further comprising operating the interrupt valve to de-isolate the outflow valve input port whenever the aircraft drops below a pre-determined altitude.

19. The method of claim 18 further comprising causing the outflow valve to open when the aircraft exceeds a second pre-determined Delta-P value that is higher than the pre-determined Delta-P value when the outflow valve input port is not isolated.

20. The method of claim 19 wherein causing the outflow valve to open does not comprise de-isolating the outflow valve input port.